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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/657,949	09/08/2000	John Peterson	07844-458001	1788

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EXAMINER

PATEL, KANJIBHAI B

ART UNIT	PAPER NUMBER
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2625

DATE MAILED: 10/01/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/657,949

Applicant(s)

PETERSON, JOHN

Examiner

Kanji Patel

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-14 and 20-29 is/are allowed.
- 6) ☒ Claim(s) 1-3 and 15-18 is/are rejected.
- 7) ☒ Claim(s) 4, 19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4-5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Preliminary amendment filed 2/21/02 has been entered.

Drawings

2. Formal drawings filed 2/21/02 have been objected by the Draftsperson (see attached PTO form 948). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3 and 15-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Szeliski et al. (hereinafter Szeliski) (US 5,986,668).

For claims 1 and 15, Szeliski discloses a method of merging images of segments of a view (at least figures 1-3 provides merging of image segments; particularly in figure 3, image segments I₀ to I₄ are combined to generate a panoramic image), comprising:

receiving a first image (at least I₀ in figures 3) representing a first segment of the view and a second image (at least I₁ in figure 3) representing a second segment of the view, the images being received from a remote location over a network;

determining the position of the second segment of the view relative to the first segment of the view without the aid of positioning information provided by a human operator (in figure 4, position of I1 with respect to I0 is determined using world coordinate system; also in figure 5, position of image 510 with respect to image 520 is determined; (at least in figure 2A, a number of program modules 35-38 are used for alignment or combination process and user only enters the commands and information into computer);

blending (in figure 3, the panoramic image shows the combination of image segments I0 to I4; also figures 6-11 are used to create a combined output image) the first image with the second image based solely on the content of the images and determined position of the second segment relative to the first segment to merge the first image and the second image into a panoramic image of the view; and

transmitting the panoramic image over the network (at least in column 8, lines 22-48 provides the explanation of use of network environment for transmission and receiving of images remotely).

For claims 2 and 17, Szeliski discloses the further comprising:

determining whether the second image overlaps the first image based on the position of the second segment relative to the first segment, wherein the blending the first image and the second image is only performed when the second image overlaps the first image (at least column 9, lines 31-51; figures 3 and 4 clearly shows the presence of overlap between images).

For claims 3 and 18, Szeliski discloses the method further comprising:

correcting perspective distortion in the second image relative to the first image prior to blending the first image with the second image (at least in figures 6-8, the alignment error is corrected before combining images I₀ and I₁).

For claim 16, Szeliski discloses the article wherein the instructions that determine the position and blend the first and second images operate without positioning information from a human operator (at least in figure 2A, a number of program modules 35-38 are used for alignment or combination process and user only enters the commands and information into computer).

Allowable Subject Matter

4. Claims 4 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 5-14 and 20-29 are allowed.

Other prior art cited

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hsu et al. (US 6,078,701) disclose a method and apparatus for performing local to global multiframe alignment to construct mosaic images.

Saund et al. (US 5,528,290) disclose a device for transcribing images on a board using a camera based board scanner.

Teo (US 6,246,413 B1) discloses a method and system for creating panoramas.

Lukacs (US 5,657,096) discloses a real time video conferencing system and method with multiplayer keying of multiple video images.

Poulo et al. (US 6,535,650 B1) disclose creating high resolution images.

Mancuso et al. (US 6,618,511 B1) disclose a perspective correction for panoramic digital camera with remote processing.

Hashimoto (US 6,249,616 B1) discloses combining digital images based on three-dimensional relationships between source image data sets.

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Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Kanji Patel** whose telephone number is (703) 305-4011. The examiner can normally be reached on Monday to Thursday from 8:00 a.m. to 6:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor **Mehta, Bhavesh** can be reached on (703) 308-5246.

The fax phone for this group is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **receptionist** whose telephone number is (703) 305-4700.



Kanji Patel
Art Unit 2625
September 20, 2003